

ABSTRACT

An apparatus for preparing specimens for microscopy including equipment for providing two or more of each of the following specimen processing activities under continuous vacuum conditions: plasma cleaning the specimen, ion beam or reactive ion beam etching the specimen, 5 plasma etching the specimen and coating the specimen with a conductive material. Also, an apparatus and method for detecting a position of a surface of the specimen in a processing chamber, wherein the detected position is used to automatically move the specimen to appropriate locations for subsequent processing.